

In the claims:

Please amend the claims as follows.

1. (Currently amended) A process for the removal of SO₂, HCN and H₂S and optionally one or more compounds from the group of COS, CS₂ and NH₃ sulfur from a first gas stream comprising SO₂, HCN and H₂S, which said process comprises the steps of:
 - (a) removing SO₂ from the first gas stream by contacting the first gas stream in a hydrogenation zone with a hydrogenation catalyst in the presence of hydrogen to convert SO₂ to H₂S and to obtain a second gas stream comprising H₂S;
 - (b) removing HCN and optionally COS and/or CS₂ from the second gas stream obtained in step (a) by contacting the second gas stream in a hydrolysis zone with a hydrolysis catalyst in the presence of water to convert HCN to ammonia and to obtain a third gas stream comprising NH₃;
 - (c) removing NH₃ from the third gas stream by contacting the third gas stream in a NH₃-removal zone with an aqueous acidic washing liquid to obtain an ammonium-comprising aqueous stream and a fourth gas stream;
 - (d) removing H₂S from the fourth gas stream by contacting the fourth gas stream in a H₂S-removal zone with an aqueous alkaline washing liquid to obtain a H₂S-depleted gas stream and a hydrogensulphide-comprising aqueous stream;
 - (e) contacting the hydrogensulphide-comprising aqueous stream obtained in step (d) with sulphide-oxidizing bacteria in the presence of oxygen in an oxidation reactor to obtain a sulphur slurry and a regenerated aqueous alkaline washing liquid;
 - (f) separating at least part of the sulphur slurry obtained in step (e) from the regenerated aqueous alkaline washing liquid and;
 - (g) recycling the regenerated aqueous alkaline washing liquid obtained in step (e) as the aqueous alkaline washing liquid to the H₂S-removal zone in step (d).
2. (Previously Presented) A process according to claim 1, wherein the sulphur- load in the H₂S-removal zone in step (d) is between 50 and 50000 kg/day.

3. (Currently Amended) A process according to claim 2₁, wherein the total concentration of sulphur[-] compounds in the treated H₂S-depleted gas stream is below 30 ppmv.

4. (Currently Amended) A process according to claim 3, wherein the total concentration of H₂S in the H₂S-depleted gas stream is below 30 ppmv.

5. (Currently Amended) A process according to claim 4, wherein the aqueous alkaline washing liquid in step (d) is buffered to maintain it at a pH of between 6 and 10.

6. (Currently Amended) A process according to claim 5, wherein the contents regenerated aqueous alkaline washing liquid of the oxidation reactor in step (e) is buffered to maintain it at a pH of between 6 and 10.

7. (Currently Amended) A process according to claim 6₂, wherein the oxidation reactor in step (e) has a volume of between 5 and 2500 m³.

8. (Currently Amended) A process according to claim 7₆, wherein the sulphur slurry obtained in step (e) is re-slurried, filtered and dried to obtain a sulphur-content of at least 95 wt%.

9. (Currently Amended) A process according to claim 8, wherein water ~~or steam or a mixture thereof~~ is added to the second gas stream prior to contacting ~~it the first gas stream in a hydrolysis zone with a~~ the hydrolysis catalyst in step (b).

10. (Previously Presented) A process according to claim 9, wherein the water/steam content of the second gas stream is between 10 v/v% and 80 v/v%, based on steam%.

Please add the following new claims:

11. (New) A process, comprising:
contacting a first gas stream that comprises SO₂, HCN, and H₂S with a hydrogenation catalyst and in the presence of hydrogen within a hydrogenation zone to thereby convert said SO₂ to H₂S and to obtain a second gas stream, comprising H₂S;

contacting said second gas stream with a hydrolysis catalyst and in the presence of water within a hydrolysis zone to obtain a third gas stream, comprising NH₃;

contacting said third gas stream with an aqueous (acidic) washing liquid within an NH₃ removal zone to yield an ammonium-comprising aqueous stream comprising an ammonium and a fourth gas stream; and

contacting said fourth gas stream with an aqueous alkaline washing liquid within an H₂S removal zone to yield a sulfide-comprising aqueous stream, comprising H₂S, and an H₂S-depleted gas stream having an H₂S concentration of less than 30 ppmv.

12. (New) A process as recited in claim 11, further comprising:

contacting said sulfide-comprising aqueous stream with sulfide-oxidizing bacteria and in the presence of oxygen within an oxidation reactor zone to obtain a sulfur slurry and a regenerated aqueous alkaline washing liquid;

separating at least part of said sulfur slurry from said regenerated aqueous alkaline washing liquid; and

recycling said regenerated aqueous alkaline washing liquid as said aqueous alkaline washing liquid to said H₂S removal zone.

13. (New) A process as recited in claim 11, wherein said first gas stream has a total concentration of sulfur compounds of between 10 ppmv and 30 vol % and a total concentration of HCN of between 10 and 5000 ppmv.

14. (New) A process as recited in claim 13, wherein said second gas stream has a concentration of SO₂ below 100 ppmv.

15. (New) A process as recited in claim 14, wherein said third gas stream has a concentration NH₃ of between 10 and 6000 ppmv and a concentration of HCN of below 0.01 vol % (100 ppmv).

16. (New) A process as recited in claim 15, wherein said fourth gas stream has a total amount of H₂S of between 10 ppmv and 20 vol %.

17. A process as recited in claim 16, wherein the hydrogenation zone operating conditions include an hydrogenation zone temperature between 200 °C and 380 °C and an hydrogenation zone pressure between 1 and 100 bara.
18. (New) A process as recited in claim 17, wherein said aqueous alkaline washing liquid has a pH in the range of from 7 to 12 and includes an hydroxide solution selected from solutions of sodium hydroxide and potassium hydroxide.
19. (New) A process as recited in claim 18, wherein said hydrogenation catalyst includes those catalysts selected from cobalt/molybdenum, cobalt/tungsten and nickel/molybdenum catalyst, and wherein said hydrolysis catalyst includes those catalysts selected from TiO₂ based catalysts, catalysts based on alumina, and catalysts based on chromium oxide.